

BOOK NOTICES

Destructive and Useful Insects—Their Habits and Control. By C. L. Metcalf and W. P. Flint. Second edition. McGraw-Hill Book Company, Inc., New York and London, 1939. Price \$7.50. 23.5 × 15 cm., xvi + 981 p., 584 figs.

This is a completely revised edition of the authors' earlier work of the same title, that was published in 1928. The first edition met with instant favor and there is no reason why the second edition should not be as favorably received as the names of these authors upon any work is a sufficient guarantee of its excellence. There are ten chapters devoted to such topics as, insects as enemies of man, the value of insects to man, external morphology of insects, internal anatomy and physiology, mouth parts, growth and metamorphosis, the orders of insects, control, including insecticides and machinery for control. The remaining thirteen chapters are concerned with insects injurious to specific crops or groups of crops such as corn and related crops, small grains, legumes, cotton, tobacco, truck crops, fruits, citrus plants, shade trees, greenhouse plants and flowers as well as with insects injurious to stored products, those found in the household and those attacking domestic animals and man.

In addition there are keys to the orders of insects in their adult and immature stages, synopses of the more important orders, and numerous (34) field keys for the identification of insects injurious to specific plants. Various tables cover such topics as lethal doses of stomach poisons, poisons to be used for chewing and sucking insects, fumigants, etc.

Pages 332 to 910, by far the greatest portion of the book, are devoted to 370 injurious species or groups of species and exclusive of the field keys, the text about each species or group embraces the importance and type of injury, plants attacked, distribution, life history, appearance and habits, and control measures. All through the book stress is laid upon recognition of the pests and their control and the authors have made these two features as adequate as existing information permitted.

In addition to being a text book for college introductory courses

in entomology, this encyclopedic work is also a reference book for farmers, fruit growers, county agents, entomologists and persons who have any interest in entomology at all or who are brought into contact with insects. It is not only comprehensive but it is also well indexed and illustrated, and were I permitted only one book on economic entomology on the traditional desert island, I am of the opinion that I would select this one.

Although the book is entitled "Destructive and Useful Insects," only 32 of the 910 pages of text are devoted to the value of insects to man, and one is inclined to wonder why the word "useful" was employed in the title, in view of the devotion of almost the entire text to injurious insects.—H. B. W.

Working with Nature. By Eleanor King and Wellmer Pessels. Harper & Brothers, New York, London, 1939. \$1.20. 19.5 × 13 cm., xv + 181 p., 60 illus.

In the June, 1939, issue of this JOURNAL three entomological books for children, by these authors, were favorably noticed and now we have another, largely entomological, by the same industrious authors, who have a flair for interesting and truthful writing on natural history subjects.

Working with Nature is a science reader for seventh and eighth grade students and it is designed to lead up easily to an understanding of the importance of wild life conservation, by showing what is going on in the everyday lives of creatures all around us and the relationships between these creatures and plant life. Insects, because of their abundance and because they are easily studied, furnish many of the examples, used by the authors in developing their subject, although other animals such as frogs, crayfish, birds and small mammals are by no means neglected. The subject matter is presented in the form of short, readable essays on such topics as "What's Going on in Your Dooryard," "In Debt to the Insects," "Butterflies and Moths," "In Pond and Brook," "Saving the Ducks!" "What the Fur-Bearers Mean to Us," etc. I think that the authors have achieved their aim in writing this book and that youthful science readers will absorb from it, unknowingly, the elementary principles of sound conservation. This is no "dry as dust" science reader, but an interesting and lively presentation.—H. B. W.